

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Brian P. Giffin

Appln. No.:

10/629,094

Filed:

Title:

July 29, 2003

System and Method for Transferring Blanks in

a Production Line

Examiner:

M. Deuble

Group Art

Unit: 3651

## RESPONSE TO NOTICE OF

# **NON-COMPLIANT APPEAL BRIEF (37 C.F.R. 41.37)**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

I hereby certify that this document is being sent via First Class U.S. mail addressed to: Mail Stop Appeal Brief, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 18<sup>th</sup> day of December, 2006.

Signature

Sir:

In response to the Notice of Non-Compliant Appeal Brief mailed on November 21, 2006, pursuant to 37 C.F.R. 41.37, Applicant submits herewith an Appeal Brief addressing the concerns laid out in the Notice of Non-Compliant Appeal Brief.

Respectfully submitted,

DORSEY & WHITNEY LLP

**Customer Number 25763** 

Date: Dec. 18, 2006

David N. Fronek (Reg. No.25,678)

(612) 340-2629



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:

Brian P. Giffin

Appln. No.:

10/629,094

Filing Date:

July 29, 2003

System and Method for Transferring Blanks

Title: in a Production Line

Examiner:

M. Deuble

Group Art Unit:

3651

# APPEAL BRIEF

Mail Stop Appeal Brief – Patents Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 I hereby certify that this document is being sent via First Class U. S. mail addressed to: Mail Stop Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this day of \_\_\_\_\_\_\_, 2006.

(Signature)

## Real Party In Interest

J&L Group International, LLC is the real party in interest as evidenced by the assignment recorded in the United States Patent and Trademark Office on July 29, 2003 at Reel/Frame: 014348/0842 from the inventor to J&L Development, Inc. and by the assignment recorded in the United States Patent and Trademark Office on May 23, 2006 at Reel/Frame: 017675/0956 from J&L Development, Inc. to J&L Group International, LLC.

# **Related Appeals and Interferences**

No patent appeal or interference is known to appellant that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### Status of the Claims

The claims in the application at the time of the appeal included claims 1-3 and 5-15. Of these, claims 1-3, 5-8 and 14 have been allowed. Independent claim 9 and respective dependent claims 10-13 and 15 stand rejected, are the subject of this appeal, and are listed separately in attached Appendix A.

#### **Status of Amendments**

No amendments have been filed subsequent to the final rejection of January 12, 2006.

Docket: 14558.01

### **Summary of Claimed Subject Matter**

As described in the specification as filed and as shown in the drawings, the present invention is directed generally to a method of transferring articles in a conveyance mechanism from a slower moving conveyor to a faster moving conveyor in a manner which substantially eliminates the difference in conveyor speeds at the point of transfer.

More specifically, with respect to independent claim 9, the only independent claim involved in the appeal, the invention is directed to a method of transferring blanks in a conveyance mechanism from a first conveyor traveling at a first velocity to a second conveyor traveling at a second velocity. This is supported in the specification on page 1, lines 10-14 and page 3, lines 22-28 and shown in Figures 4A-4F and Figure 7.

The specific method steps of independent claim 9 are summarized and supported as follows:

<u>Dispensing</u> - - dispensing a plurality of blanks from a feeder into a first conveyor, the blanks being dispensed into the first conveyor adjacent to one another in the direction of the travel of said first conveyor;

As shown best in the schematic illustrations of Figures 4A-4F, a plurality of blanks 50A, 50B and 50C, etc. are initially dispensed into a first conveyor 26. This first conveyor is traveling, and thus advancing the blanks, toward a second conveyor 30 at a first velocity (page 3, lines 23, 24; page 4, lines 3-7; page 6, lines 3-7, 24-27; page 7, lines 3-6; page 8, lines 3-6; page 11, lines 21, 22; Figures 1 and 4A-4F.

<u>Advancing</u> - - advancing the plurality of blanks by said first conveyor toward a second conveyor at a first velocity, said second conveyor traveling at a second velocity and said second velocity being greater than said first velocity;

In Figures 4A-4F, this is shown in sequence as the plurality of blanks 50A, 50B, 50C, etc. are fed into the right hand end of the conveyor 26 (the first conveyor) and are advanced along the conveyor 26 toward the conveyor 30 (the second conveyor). During this advancing step, the first conveyor 26 is traveling at a first velocity (page 3, lines 22-24; page 4, lines 7, 8; page 7, lines 1,

2; page 8, lines 3-5; step 120 of Figure 7) and the second conveyor 30 is traveling at a second velocity which is greater than the first velocity (page 4, lines 7-11; page 7, lines 1-3, 6-8; page 8, lines 7-9, 15-17).

Docket: 14558.01

<u>Detecting</u> - - detecting the position of a given blank of said plurality of blanks in said first conveyor as said given blank approaches said second conveyor;

The step of detecting the position of a given blank is accomplished by a detector such as the photodetector 44 shown in Figures 2 and 4A-4F and shown in the step 130 of Figure 7. As a given blank approaches the second conveyor 30, the photodetector 44 detects the position (such as the leading edge) of the given blank (page 4, lines 9-13; page 5, lines 3-5; page 8, lines 3-6; page 11, lines 22-24; page 13, lines 10, 11).

<u>Accelerating</u> - - accelerating the first conveyor from the first velocity to substantially match the second velocity in response to detecting the position of said given blank;

After the position of the given blank is detected by the photodetector 44, and in response to such detecting, the first conveyor 26 is accelerated from the first or feeder velocity to the second or carrier velocity (page 3, lines 24, 25; page 4, lines 11-13; page 5, lines 3-9; page 7, lines 8-11; page 8, lines 7-10; page 11, lines 24, 25; page 13, lines 10-14; step 140 of Figure 7).

<u>Transferring</u> - - transferring said given blank from the first conveyor to the second conveyor after said accelerating step;

Following acceleration of the first, feeder conveyor 26 to match the velocity of the second carrier conveyor 30, the given blank is transferred to the second conveyor (page 3, lines 25, 26; page 4, lines 13-15, page 7, lines 8-11). This is accomplished by moving the given blank (50A in Figures 4A-4F) out of the first conveyor 26 and into the second conveyor 30. Specifically, the leading edge of the blank is conveyed to a nip point 46 between the belts 36, 38 and the frictional engagement between the belts 36, 38 and the blank causes the blank to be engaged and transferred to the conveyor 30 (page 7, lines 16-24; page 8, lines 20-23; page 13, lines 15, 16; steps 150 and 160 of Figure 7).

<u>Decelerating</u> - - decelerating the first conveyor to the first velocity after said accelerating step and in response to detecting the position of said given blank so that said given blank and a subsequent blank in said first conveyor immediately adjacent to said given blank travel at different velocities after said transferring step;

After the blank has been transferred to the second, carrier conveyor 30, the first conveyor 26 is decelerated back to its first, slower velocity (step 180 of Figure 7). During this deceleration, the given blank and the subsequent blank immediately adjacent to the given blank travel at different velocities (page 3, lines 26, 27; page 4, lines 13-19, page 7, lines 11-14. This deceleration step is in response to detecting the position of the given blank (page 8, lines 3-11, 24-28; page 9, lines 5-12; page 11, lines 15-20; page 12, lines 2, 3, 14-20; page 13, lines 17-21).

<u>Repeating</u> - - repeating said detecting, accelerating, transferring and decelerating steps for each said subsequent blank.

After the given blank is transferred, the detecting, accelerating, transferring and deceleration steps are repeated for each of the subsequent blanks (page 12, lines 5-9; steps 190 and 120-180 of Figure 7).

## Grounds of Rejection To Be Reviewed On Appeal

Whether claims 9-12 are anticipated under 35 U.S.C. § 102(b) by Cordia et al. (U.S. Patent No. 5,341,915); whether claim 15 is unpatentable under 35 U.S.C. § 103(a) over Long (U.S. Patent No. 5,129,641) in view of Cordia et al.; and whether claim 13 is unpatentable under § 103(a) over Long in view of Cordia et al. and further in view of Delsanto (U.S. Patent No. 5,038,915).

#### Argument

1. Rejection under 35 U.S.C. § 102(b) over Cordia et al.

#### a. Claim 9

The single reference relied upon by the Examiner for the § 102(b) rejection of claim 9 is the Cordia et al. Patent No. 5,341,915.

Independent claim 9 is directed to a method of transferring blanks including, among other things, the steps of detecting, accelerating, transferring and decelerating with respect to a given blank and repeating such detecting, accelerating, transferring and decelerating steps for each subsequent blank. The Examiner's position is that Cordia et al. discloses a method of delivering articles, which could be blanks, including the steps of detecting, accelerating, transferring and

decelerating with respect to a given blank and repeating the steps of detecting, accelerating, transferring and decelerating for each subsequent blank. Applicant disagrees.

In Cordia et al., a series of conveyors is disclosed for transferring articles from an initial low friction accumulation conveyor 12 traveling at a velocity  $V_1$  to a target conveyor 11 traveling at a faster velocity  $V_5$ . This series of conveyors includes a first phasing/transfer conveyor 20 and a second phasing/transfer conveyor 21. The conveyors 20 and 21 are the conveyors upon which the Examiner relies for his rejection. Each of the conveyors 20 and 21 includes a phasing conveyor and a transfer conveyor. Specifically, the conveyor 20 includes the phasing conveyor 25 and the transfer conveyor 26, while the conveyor 21 includes the phasing conveyor 22 and the transfer conveyor 23.

Both of the phasing/transfer conveyors 20 and 21 function in the same manner, with the velocities of each of their respective transfer conveyors 26 and 23 being constant and traveling at the same velocity V<sub>5</sub> as the target conveyor 11. In contrast, each of their respective phasing conveyors 25 and 22 is operated by a servo motor which can either accelerate the conveyors 25 or 22, decelerate the conveyors 25 or 22 or simply maintain the speed of the conveyors 25 or 22 at their current velocity. Since both conveyors 20 and 21 function in the same manner, only the operation of the phasing/transfer conveyor 21 will be discussed.

The main function of the phasing/transfer conveyor 21 is to transfer articles from the accumulation pre-phasing conveyor 15 in which adjacent articles are non-uniformly spaced, to the target conveyor in a manner which uniformly spaces adjacent articles a desired distance from one another. Specifically, the phasing/transfer conveyor 21, which is comprised of the phasing conveyor 22 and the transfer conveyor 23, receives articles from the accumulation conveyor 15 in which the spacing is not uniform, adjusts the spacing via the phasing conveyor 22 and then transfers the properly spaced articles to the faster moving transfer conveyor 23. The articles are then further transferred from the transfer conveyor 23 to the target conveyor 11.

More specifically, articles are received by the phasing conveyor 22 from the accumulation conveyor 15 with non-uniform spacing. During travel of the articles along the phasing conveyor 22, a photocell P<sub>1</sub> detects the leading edge of a given article. If the article is out of phase, such as being in a position along the flow path before or after where it should be (and thus does not exhibit the proper gap or spacing) relative to the immediately preceding article, the phasing conveyor 22 is either accelerated or decelerated momentarily to properly

reposition the article. Then, when the articles are transferred from the phasing conveyor 22 to the faster moving transfer conveyor 23, the articles on the transfer conveyor 23 are properly spaced. For example, if the article detected by the photocell  $P_1$  is positioned on the phasing conveyor 22 in which it is too close to the immediately preceding article, the phasing conveyor 22 will be decelerated prior to transfer of such detected article to the faster moving transfer conveyor 23 so as to increase the spacing from the immediately preceding article. On the other hand, if two adjacent articles are spaced too far apart, the phasing conveyor will be accelerated immediately prior to transfer of the following detected article to the transfer conveyor 23 so as to close the gap between such article and the immediately preceding article. If the gap between two articles on the phasing conveyor 22 are as desired, no speed adjustment is needed and thus the phasing conveyor 23 would be maintained at its then current speed. In all cases, the transfer conveyor 23 travels at a constant velocity which is the same as the velocity  $V_5$  of the target conveyor 11 and at a velocity which is faster (approximately 1.6 times) than the normal velocity  $V_3$  of the phasing conveyor 22.

Docket: 14558.01

Accordingly, the transfer method of Cordia et al. from the phasing conveyor 22 to the transfer conveyor 23 is essentially a three-step process. The first step is a detecting step in which the leading edge of a given article is detected by the photocell P<sub>1</sub> of the phasing conveyor 22. The second step is a step of acceleration, deceleration or maintenance of the conveyor 22 at its then current velocity, depending upon the position of the detected article relative to the immediately preceding article. If the two articles are too closely spaced, the phasing conveyor 22 will be decelerated immediately prior to transfer to the conveyor 23 so as to increase the gap to the desired distance. If the spacing is too large, the phasing conveyor 22 will be accelerated immediately prior to transfer to the conveyor 23 so as to decrease the gap between adjacent articles. If the spacing between the detected article and its immediate preceding article is proper, no speed adjustment is necessary. The third step of Cordia et al. is the step of transferring the article from the phasing conveyor 22 to the transfer conveyor 23. This is accomplished with the phasing conveyor 22 operating at various speeds (depending upon the second step), but with the transfer conveyor 23 operating at a faster constant speed and at the speed of the target conveyor 11.

Accordingly, the objective and operation of the transfer method of Cordia et al. and the objective and operation of the transfer method of the present invention as set forth in

independent claim 9 are completely different. First, the objective of Cordia et al. is to insure that articles are transferred from the phasing conveyor 22 to the transfer conveyor 23 with equal spacing. Cordia et al. is not concerned about transfer between conveyors traveling at different speeds. In fact, the transfer from the conveyor 22 to the conveyor 23 occurs when such conveyors 22, 23 are traveling at different speeds. In contrast, the objective of the present invention is to transfer articles from a normally slower moving conveyor to a faster moving conveyor at a point in time when the conveyors are temporarily moving at the same speed.

Second, in Cordia et al., the phasing conveyors 22 or 25 (corresponding to the first conveyor of claim 9) never are accelerated to the velocity of their respective transfer conveyors 23 or 26 (corresponding to the second conveyor of claim 9). In fact, the clear disclosure is that the velocity of the transfer conveyors 23 or 26 is constant and 1.6 times the velocity of their respective phasing conveyors 22 or 25. Thus, the claim 9 step of accelerating the first conveyor "from the first velocity to substantially match the second velocity" is not present or disclosed in Cordia et al.

Third, Cordia et al. does not disclose a method involving the steps of "detecting, accelerating, transferring and decelerating" with respect to each given blank. As disclosed in Cordia et al., as discussed in applicant's Response filed October 26, 2005, and as acknowledged by the Examiner, in the final action of January 12, 2006, the phasing conveyors 22 and 25 of Cordia et al. are either accelerated, or decelerated, or maintained at the same velocity. Thus, as each article in the Cordia et al. system is detected, the phasing conveyors are either accelerated or decelerated or maintained at the same velocity in response to the detecting step. Accordingly, for each article in the Cordia et al. system, there is a detection, followed by an acceleration or a deceleration or a maintenance at the same velocity and then followed by a transfer. The threestep cycle of (1) detecting, (2) accelerating, decelerating or maintenance at the same velocity and (3) transfer are then repeated for each successive article. In other words, there is no deceleration step following the transfer step and prior to the next detection step in Cordia et al. as is required by claim 9. In Cordia et al., it appears that as soon as the transfer from the conveyor 22 to the conveyor 23 is made, the phasing conveyor maintains that the same speed (whether it is an accelerated speed, a decelerated speed or the same speed) until the detection of the next article is made. Following the next detecting step, the detected article is then again, depending upon the

velocity, followed again by the transfer.

position of the detected article, either accelerated or decelerated or maintained at the same

Docket: 14558.01

Fourth, in direct contrast to the above-described operation of Cordia, and as clearly required by claim 9, claim 9 requires that the first conveyor always be accelerated from the first velocity to the second velocity in response to the detecting step for a given blank and for each of the subsequent banks. Then, after transfer of the given blank, the first conveyor is always decelerated to the first velocity in response to the detecting step, after which the cycle of detecting, accelerating, transferring and decelerating are repeated for each subsequent blank. Thus, the first conveyor, for each given blank and for each subsequent blank in accordance with claim 9 is subject to a four-step process of (1) detecting, (2) accelerating, (3) transferring and (4) decelerating, after which the process is repeated for each subsequent blank. As discussed above, this process is clearly different than the three-step process of Cordia et al. in which there is no deceleration step following the transfer step (and prior to the next detection step) and in which there is not always an acceleration step after the detection step. Instead, following the transfer, the next article is merely detected and the speed of the phasing conveyor is adjusted accordingly. Such adjustment could be acceleration, deceleration or no change at all.

In the rejection, the Examiner states that claim 9 only requires that the first conveyor be accelerated in response to the detecting step "for a number of subsequent blanks". This is not true. There is no language in claim 9 that requires the first conveyor to be accelerated in response to the detecting step "only for a number of subsequent blanks". In contrast, the last step of claim 9 requires "repeating said detecting, accelerating, transferring and decelerating steps for each said subsequent blank" (emphasis added). Further, in the "decelerating" step language, "subsequent blank" is defined as being "immediately adjacent to said given blank". Thus, independent claim 9 requires the detecting step, the accelerating step, the transferring step and the decelerating step to be applied to the given blank and to each of the subsequent blanks.

Accordingly, neither independent claim 9 nor any of its dependent claims is anticipated by Cordia, et al. under 35 USC § 102(b).

#### b. Claim 10

Claim 10 depends directly from claim 9 and is thus patentable for the same reasons.

Claim 10 further requires decelerating the first conveyor after a predetermined period of

time has elapsed after said accelerating step. This is not disclosed in Cordia et al. In Cordia et al., as indicated above, there is no such deceleration step. Even in the situation where a detected blank and the preceding blank are too closely spaced so that momentary deceleration is needed, there is not necessarily a preceding acceleration step from which a period of elapsed time can be measured. Even if there was, the time elapsed would not be predetermined, but would depend on the space adjustment needed between articles.

#### c. Claim 11

Claim 11 depends directly from claim 10 and ultimately from claim 9 and is thus patentable for the same reasons as claims 9 and 10.

Claim 11 further requires calculating the predetermined period of time with a controller. To the extent Cordia et al. discloses a deceleration step, it is not based on a predetermined time and is not calculated with a controller. In fact, deceleration, to the extent it occurs, is a function of how fast the phasing conveyor 22 is moving relative to the transfer conveyor 23 and the position of the detected article on the conveyor 22.

#### d. Claim 12

Claim 12 depends directly from claim 11 and ultimately from claims 9 and 10 and is thus patentable for the same reasons as claims 9, 10 and 11.

Claim 12 further requires the calculating step being based on a length of the given blank, the first velocity and the second velocity. No such calculating step is disclosed or occurs in Cordia et al.

# 2. Rejection under 35 U.S.C. § 103(a) of Claim 13 over Long in View of Cordia et al.

Dependent claim 15 depends immediately from independent claim 9 discussed above with respect to the § 102 rejection and is considered patentable for the same reasons as claim 9.

With respect to the rejection under § 103(a), claim 15 further requires the second conveyor to include upper and lower belt members in a nip in which the transferring step occurs by conveying the given blank into the nip.

The Long patent is directed to a multi-stage dispenser for delivering cards or the like and includes a plurality of conveyor stages 18A, 18B and 18C. The sole purpose of the invention of Long is to dispense cards to advance and fill gaps in a feed sequence while the leading card is temporarily resting at the command location. Although each of the three conveyor stages 18A, 18B and 18C is independently controlled, the speed at which these conveyors operate, when they are actuated, is the same and is constant. Further, each of the conveyor stages 18A, 18B and 18C are either in a stopped or rest position or a moving position operating at a fixed, constant velocity.

Docket: 14558.01

The Examiner's position is that Long discloses a feeder conveyor 18B which is capable of acceleration from a first velocity to a second velocity and deceleration from the second velocity to the first velocity. Applicant disagrees since, as mentioned above, the conveyor 18B is either stopped (with zero velocity) or is moving at its operational speed which the Examiner is considering to be its second velocity. Although it can be argued that zero velocity is a first velocity, the analysis breaks down when the requirements of claim 9 are more closely reviewed. For example, claim 9 requires "advancing the plurality of blanks by said first conveyor toward a second conveyor at a first velocity". If the first velocity is zero, such advancement cannot occur.

Further, the Examiner's position is that Long shows all the steps required by the claims except for a controller operably coupled to the servo motor and the blank detector which increases the speed of the feeder conveyor from the first velocity to the second velocity in response to the blank detector detecting the position of a given blank and to decrease the feeder conveyor from the second velocity to the first in response to the blank detector detecting the position of a given blank. Again, applicant respectfully disagrees. In Long, although each of the conveyor stages operates independently from each other, the drive motors 36A, 36B and 36C are electrically interconnected whereby drive motors 36B and 36C are slaves to the drive motor 36A and drive motor 36C is slave to the drive motor 36B (column 2, lines 22-25). Thus, when any of the stages 18A, 18B or 18C is actuated, each preceding stage is actuated as well. This means that if stage 18A is activated, both stages 18B and 18C will be actuated as well. Similarly, if stage 18B is actuated, stage 18C will be actuated as well. This is totally different than the system of the present invention as presently claimed.

Still further, for the same reasons discussed above with respect to the § 102 rejection of claim 9, Cordia et al. fails to disclose accelerating the feeder conveyor to the second velocity in

response to detecting the position of a given blank and decelerating the feeder conveyor from the second velocity to the first velocity in response to detecting the position of a blank. As discussed above, although there are circumstances in which the feeder conveyor of Cordia et al. will accelerate the feeder conveyor (depending upon the position of the detected blank), it will also sometimes decelerate the feeder conveyor or maintain it at the same velocity (again depending on the position of the blank). However, the feeder conveyor will then be maintained at such accelerated or decelerated or maintained velocity until the next blank is detected. Specifically,

Docket: 14558.01

Further, during operation of the device of Long, the photodetectors do not function to accelerate any of the conveyor stages as required by the claims, but instead functions to stop them. In other words, arrival of a card at a position where it is detected by the photocell indicates that the demand is satisfied and its corresponding conveyor stage stops its respective drive motor. See discussion in column 2, lines 42-54. Specifically, acceleration or actuation of the conveyor stages from a stopped position to an accelerated position is not triggered by the photodetector detecting the leading edge of a given blank, but rather by a card being dispensed from the conveyor stage 18A to a subsequent system.

there is no additional deceleration step following the transfer as required in the present claims.

The bottom line is that even if Long and Cordia et al. are combined in the manner suggested by the Examiner, the required method steps of independent claim 9 and dependent claim 15 are not met.

Still further, even if they were somehow met, which they are not, the operation and function of both Long and Cordia et al. are so different that it would not have been obvious to a person skilled in the art to make that combination. Specifically, Long is directed to a method and apparatus for delivering the cards or the like in sequence from a stack of cards to a demand location through a plurality of conveyor stages. As disclosed, each of the conveyor stages is either at a zero velocity or is advancing at a given, constant velocity. None of the conveyors operates or is capable of operating at two different non-zero velocities as required by Cordia et al. Further, Long requires and claims when a stage of the conveyor system is actuated, each preceding stage is also simultaneously actuated. Modifying this structure and operation of Long as suggested by the Examiner would be completely contrary to the teachings of Long and thus not obvious.

Accordingly, dependent claim 15 is patentable.

# 3. Rejection under 35 U.S.C. § 103(a) of Claim 13 over Long in View of Cordia et al. and Delsanto

Dependent claim 13 depends immediately from claim 11 and ultimately from independent claim 9 discussed above. Accordingly, dependent claim 15 is patentable for the same reasons discussed above with respect to claim 9.

With respect to the rejection under § 103(a), the Examiner's position is that Long and Cordia et al. show all steps required by the claims except for the step of entering a blank length and first and second velocities into the controller of claim 13. For the reasons discussed above with respect to independent claim 9 and dependent claim 15, applicant respectfully disagrees. Further, although Delsanto appears to teach entering the length of the articles to be synchronized into the PLC 84 via the thumb wheel switch 70, Delsanto fails to disclose entering first and second velocities into the controller as required in claim 13. As described in the present application, a machine operator actually enters the blank length, the carrier section belt speed and the feeder section belt speed into a user interfacer which is shown in Figure 5. These velocities are predetermined, known velocities or speeds. If the difference between the two belt speeds is too great for the feeder to accelerate/decelerate within the given box length, the operator is prompted to increase the feeder speed to a calculated feeder speed which the feeder's acceleration can achieve within the given box length. See discussion on page 13, lines 1-6 of the present application.

In Delsanto, no such velocities are entered into the controller. Rather, the speeds are merely monitored so that the apparatus of Delsanto is synchronized. Accordingly, dependent claim 13 is patentable.

Application Number: 10/629,094 Docket: 14558.01

## **Conclusion**

In view of the foregoing, Applicant respectfully submits that the Examiner's rejections of claims 9-12 under 35 USC § 102(b) and claims 13 and 15 under 35 U.S.C. § 103(a) are without merit and should be reversed. Accordingly, the allowance of claims 9-13 and 15 is respectfully requested.

Respectfully submitted,

DORSEY & WHITNEY LLP Customer Number 25763

Date: DEC. 18, 2006

3y: /

avid N. Fronek, Reg. No. 25,678

(612) 340-2629

#### APPENDIX A – STATUS OF APPEAL CLAIMS

9. (Rejected) A method of transferring blanks in a conveyance mechanism, the method comprising:

dispensing a plurality of blanks from a feeder into a first conveyor, the blanks being dispensed into the first conveyor adjacent to one another in the direction of the travel of said first conveyor;

advancing the plurality of blanks by said first conveyor toward a second conveyor at a first velocity, said second conveyor traveling at a second velocity and said second velocity being greater than said first velocity;

detecting the position of a given blank of said plurality of blanks in said first conveyor as said given blank approaches said second conveyor;

accelerating the first conveyor from the first velocity to substantially match the second velocity in response to detecting the position of said given blank;

transferring said given blank from the first conveyor to the second conveyor after said accelerating step;

decelerating the first conveyor to the first velocity after said accelerating step and in response to detecting the position of said given blank so that said given blank and a subsequent blank in said first conveyor immediately adjacent to said given blank travel at different velocities after said transferring step; and

repeating said detecting, accelerating, transferring and decelerating steps for each said subsequent blank.

- 10. (Rejected) The method of claim 9, wherein decelerating the first conveyor occurs when a predetermined period of time has elapsed after said accelerating step.
- 11. (Rejected) The method of claim 10, including calculating the predetermined period of time with a controller.
- 12. (Rejected) The method of claim 11, wherein the calculating step is based on a length of said given blank, the first velocity and the second velocity.

- 13. (Rejected) The method of claim 11, further comprising:
  entering a blank length into the controller;
  entering the first velocity into the controller; and
  entering the second velocity into the controller, wherein the controller utilizes the blank
  length, the first velocity and the second velocity to calculate the predetermined period of time.
- 15. (Rejected) The method of claim 9 wherein said second conveyor includes upper and lower belt members and a nip and the transferring step occurs by conveying said given blank into said nip.

# APPENDIX B – EVIDENCE APPENDIX

None

# APPENDIX C – RELATED PROCEEDINGS APPENDIX

None